

Amendments to the Claims

Please amend the claims in accordance with the following listing of claims.

Listing of Claims

- Claim 1. (Amended) A method for treating a subject for asthma, comprising administering to a subject in need of such treatment an immunogenic composition comprising at least two different Th2 cytokines (or peptide fragments thereof) selected from the group consisting of eotaxin, eotaxin-2, eotaxin-3, IL-4, IL-5, IL-9, and IL-13, said Th2 cytokines or peptide fragments thereof being coupled to an immunogenic carrier derived from one or more of protein toxoids, keyhole limpet hemocyanin (KLH), influenza virus haemagglutinin, Bacille Calmette Guerin (BCG), and ovalbumin (OVA) an inflammatory condition which results from eosinophil accumulation which comprises generating in an amount and manner effective to induce an active immune response in the patient subject comprising production of autoantibodies to said cytokines eotaxin and IL-5 in said subject.
- Claim 2. (Amended) A method of treating a subject for a condition which results from asthma, allergy or allergic disease comprising generating an immune response in the subject to eotaxin and IL-5. The method according to claim 1 wherein the Th2 cytokines or peptide fragments thereof comprise (i) eotaxin or peptide fragments thereof and (ii) IL-5 or peptide fragments thereof.
- Claim 3. (Withdrawn) An immunogenic composition comprising eotaxin or a peptide fragment thereof and IL-5 or a peptide fragment thereof coupled to an immunogenic carrier.
- Claim 4. (Withdrawn) An immunogenic composition comprising a T-cell epitope, an epitope derived from IL-5 and an epitope derived from eotaxin.

- Claim 5. (Withdrawn) An immunogenic composition according to claim 3 for the treatment of asthma, allergy or allergic disease comprising eotaxin or a portion thereof and IL-5 or a portion thereof conjugated to an immunogenic protein carrier.
- Claim 6. (Withdrawn) A method of producing the composition of claim 3 which comprises coupling the eotaxin or a portion thereof and the IL-5 or a portion thereof to the immunogenic carrier.
- Claim 7. (Amended) ~~A method of treating a disorder involving an immunomodulatory pathway comprising multiple cytokines the method comprising actively immunizing a subject against two or more cytokines in the pathway so as to elicit autoantibodies in the subject which can bind to and modulate the activities of the cytokines~~ The method of claim 1 wherein the immunogenic carrier is derived from diphtheria toxoid or tetanus toxoid.
- Claim 8. (Amended) The method of claim 1 wherein the immunogenic composition is in the form of a water-in-oil emulsion ~~7 wherein the pathway is the Th-2 pathway.~~
- Claim 9. (Amended) The method of claim 8 2 wherein the immunogenic carrier is coupled to both (i) eotaxin or a peptide fragment thereof and (ii) IL-5 or a peptide fragment thereof ~~subject is actively immunized against IL-5 and eotaxin.~~
- Claim 10. (Withdrawn) A method for treating a subject for a condition mediated by eotaxin, which comprises generating an active immune response in the subject to eotaxin and at least one cytokine selected from the group consisting of eotaxin-2, eotaxin-3, IL-4, IL-5, IL-9 or IL-13.
- Claim 11. (Withdrawn) The method of claim 10 wherein the condition mediated by eotaxin is asthma, allergy or allergic disease.
- Claim 12. (Withdrawn) The immunogenic composition of claim 5 comprising at least one peptide sequence selected from the peptide sequences set forth in SEQ ID NOS 1-

38, 42-61 and 117-121 and 130-132 and at least one peptide sequence selected from the peptide sequences set forth in SEQ ID NOs 62-116 and 122-123.

- Claim 13. (Withdrawn) A method of ameliorating eosinophilia in a human subject which comprises downregulating eotaxin and concurrently down regulating a cytokine selected from the group consisting of eotaxin-2, eotaxin-3, IL-4, IL-5, IL-9, or IL-13.
- Claim 14. (Withdrawn) A multivalent immunogenic composition for actively immunizing a subject to treat a Th-2 immune disorder comprising an immunogenic carrier conjugated to a plurality of peptide epitopes derived from two or more Th-2 cytokines.
- Claim 15. (Withdrawn) The composition of claim 14 wherein the Th-2 cytokines are selected from the group consisting of eotaxin-1, eotaxin-2, eotaxin-3, IL-4, IL-5, IL-9 or IL-13.
- Claim 16. (New) The method of claim 2 wherein the eotaxin of peptide fragment thereof comprises at least one peptide sequence selected from the peptide sequences set forth in SEQ ID NOs 1-38, 42-61 and 117-121 and 130-132 and wherein the IL-5 or peptide fragment thereof comprises at least one peptide sequence selected from the peptide sequences set forth in SEQ ID NOs 62-116 and 122-123.